

2 Hazards Identification

2.1 Classification of the substance or mixture *CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]*

Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.

2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other Hazards

None

3 Composition/Information On Ingredients

3.2 Mixture

Component		Classification	Concentration
L-Ornithine monohydrochloride			
CAS No. :	3184-13-2	As Per EC Regulation 1272/2008	>=10.0 - <=20.0%
EC No. :	221-678-6	H319	

Page **1** of **8**

Component		Classification	Concentration
L-Cysteine hydrochloride			
CAS No. :	52-89-1	As Per EC Regulation 1272/2008	>=0.1 - <=1.0%
EC No. :	200-157-7	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3	
		Н315; Н319; Н335	

Component		Classification	Concentration
Ferric ammonium citrate			
CAS No. :	1185-57-5	As Per EC Regulation 1272/2008	>=1.0 - <=10.0%
EC No. :	214-686-6	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3	
		H315; H319; H335	

Component		Classification	Concentration
Sodium deoxyc	holate		
CAS No. : EC No. :	302-95-4 206-132-7	As Per EC Regulation 1272/2008 Acute Tox.oral 4; STOT SE 3 H302;	>=1.0 - <=10.0%
	200 102 /	H335	

Refer Section 16 for complete statement of H codes and its classification

4 First Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2** Most important symptoms and effects, both acute and delayed No data available.
- **4.3** Indication of immediate medical attention and special treatment needed No data available

5 Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media

Page **2** of **8**

	No data available.
5.2	Special hazards arising from the substance or mixture
	Carbon oxides, Sulphur oxides, Nitrogen oxides (NOx), Sodium oxides, Hydrogen chloride gas, Iron
	oxides
5.3	Precautions for fire-fighters
	Wear self contained breathing apparatus for fire fighting if necessary
5.4	Further information
	No data available
·	
6	Accidental Release Measures
6.1	Personal precautions, protective equipment and emergency procedures
	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
	Evacuate personnel to safe areas.
6.2	Environmental precautions
	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
6.3	Methods and materials for containment and cleaning up
	Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed
	containers for disposal.
6.4	Reference to other sections
	For disposal see Section 13.
7	Handling and Storage
7.1	Precautions for safe handling
	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for
	preventive fire protection.
7.2	Conditions for safe storage, including any incompatibilities
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which
	are opened must be carefully resealed and kept upright to prevent leakage.
	Recommended Storage Temperature : On receipt store between 10-30°C
7.3	Specific end uses
	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
8	Exposure Controls/Personal Protection
8.1	Control parameters
0.1	Components with workplace control parameters
8.2	Exposure controls
0.2	Appropriate engineering controls
	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after
	handling the products.
	Personal protective equipment
	Hygiene measure
	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face
	after working with the product.
	Eye/face protection

Tightly fitting saftey goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425/EEC and the standard EN ISO 374-1/2016 derived from it.

Body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environment exposure controls

Do not empty into drains.

9 Physical and chemical properties

9.1	Information on basic physical and chemical properties			
	Appearance	Light yellow to light green coloured		
		homogeneous free flowing powder		
	Odour	No data available		
	Odour Threshold	No data available		
	рН	6.80 - 7.20		
	Melting/freezing point	No data available		
	Initial boiling point and boiling range	No data available		
	Flash point	No data available		
	Flammability (Solid, gas)	No data available		
	Vapour pressure	No data available		
	Relative density	No data available		
	Water Solubility	No data available		
	Partition coefficient: n-octanol/water	No data available		
	Autoignition Temperature	No data available		
	Viscosity	No data available		
	Explosive properties	No data available		
	Oxidizing properties	No data available		
	Vapour density	No data available		
	Thermal decomposition	No data available		

9.2 Other safety information

No data available

10 **Stability and Reactivity**

10.1 Reactivity

	No data available
10.2	Chemical stability
10.2	No data available
10.3	Possibility of hazardous reactions
10.5	No data available
10.4	Conditions to avoid
10.4	No data available
10.5	Incompatible materials
10.5	Strong oxidizing agents
10.6	Hazardous decomposition products
10.0	Refer Section 5.2. Other Decomposition products not known.
11	Toxicological Information
11.1	Information on toxicological effects
	Acute toxicity
	No data available
	Skin corrosion/irritation
	No data available
	Serious eye damage/eye irritation
	Mixture may cause eye irritation.
	Respiratory or skin sensitisation
	No data available
	Germ cell mutagenicity
	No data available
	Carcinogenicity
	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as
	probable, possible or confirmed human carcinogen by IARC.
	Reproductive toxicity
	No data available
	Specific target organ toxicity- single exposure
	No data available
	Aspiration hazard
	No data available
	Potential Health Effects
	Inhalation
	REFER SECTION 2
	Skin
	REFER SECTION 2
	Eyes
	REFER SECTION 2
	Ingestion
	REFER SECTION 2

Additional Information RTECS : No data available

11.2 Components

L-Ornithine HCL Acute Oral Toxicity Rat LD50 :10 g/kg **AddItional Information** RTECS :RM2985000 L-Cysteine Hydrochloride Acute toxicity Mouse Intravenous LD50: 771 mg/kg Mouse Intraperitoneal LD50: 1,250 mg/kg Germ cell mutagenicity Mouse(male) Result: Negative **Additional Information:** RTECS: HA2275000 Ferric ammonium citrate Acute Oral Toxicity RatLD50: >2000 mg/kg Acute Potential Health Effects Skin Contact may cause irritation or rash, particularly with moist skin. Eyes May cause eye irritation with redness, tearing, and abrasion. Inhalation Inhalation of high concentrations of dust may cause nasal, throat or lung irritation. Symptoms may include coughing and wheezing. Ingestion Ingestion can produce gastrointestinal tract irritation with hyper motility, diarrhea.

Chronic Potential Health Effects Eyes Prolonged eye contact may cause a brownish discoloration of the eyes. Skin

Prolonged skin contact may cause skin irritation.

Additional information:

RTECS: GE7540000 Sodium Deoxycholate Acute Oral Toxicity Rat LD50: 1,370 mg/kg (As Per RTECS) Rat Intraperitoneal LD50: 123 mg/kg Rat Subcutaneous LD50: 2,430 mg/kg Additional Information: RTECS FZ2250000

12 Ecological Information

12.1 Toxicity

No data available

Page **6** of **8**

Ammonium Ferric Citrate Eco toxicity

No data available.

Components Sodium deoxycholate Toxicity to Fish Oryzias latipes LC50: 115mg/l; 48h

12.2 Persistence and degradability No data available

- **Bioaccumulative potential** 12.3 No data available
- 12.4 Mobility in soil
- No data available 12.5 PBT and vPvB assessment

No data available

12.6 Other adverse effects No data available

13 **Disposal Considerations**

13.1 Waste treatments methods

Product

Offer surplus and non-recyclable solutions to a licenced company. Contact a licenced professional waste disposal service to dispose off this material.

13.2 **Contaminated packaging**

Dispose of as unused product.

14 **Transport Information**

14.1 UN-No

ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

UN proper shipping name 14.2

- ADNR : Not dangerous goods ADR
- : Not dangerous goods IATA C : Not dangerous goods
- IATA_P : Not dangerous goods
- IMDG
- : Not dangerous goods RID : Not dangerous goods
- 14.3 Transport hazard class(es)

ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : -

14.4 Packaging group

	ADR :	IATA_C :	IATA_P :	IMDG :	RID :
--	-------	----------	----------	--------	-------

14.5 **Environmental hazards**

ADNR : No ADR : No IMDG : Marine pollutant No IATA C : No IATA P : No RID : No

Page 7 of 8

14.6 Special precautions for use No data available

15 Regulatory Information This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 15.1 Safety health and environment regulations/legislation specific for the substance or mixture No data available 15.2 Chemical Safety Assessment No data available

16 Other information

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Acute Tox.oral 4	Acute toxicity, oral, Category 4
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion or irritation, Category 2
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract
	irritation, Category 3

Further Information

Copyright 2016 HiMedia Laboratories Pvt. Ltd.

The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.

Page **8** of **8**